

[TITLE OF THE INVENTION]

Information Processing Apparatus, Information Processing Method and Information Processing Program

[WHAT IS CLAIMED IS:]

1. An information-processing apparatus comprising:
 - an input unit that inputs text data;
 - a text-data-memory unit that stores said text data;
 - a word-cutting unit that executes a word-cutting process on said text data;
 - a syntax-analysis unit that performs a syntax-analysis process on said text data on which said word-cutting process was performed;
 - a thesaurus-creation unit that creates thesauruses from said text data on which said syntax-analysis process was performed;
 - a thesaurus-memory unit that stores said thesauruses created by said thesaurus-creation unit;
 - a thesaurus-sorting unit that performs a sorting process on said text data on which said word-cutting and said syntax-analysis were performed;
 - a sorting-results-memory unit that stores the sorting results from said thesaurus-sorting unit;
 - a frequency-of-appearance-calculation unit that calculates the frequency of appearance for each thesaurus based on said sorting results stored by said sorting-results-memory unit;
 - a frequency-of-appearance-memory unit that stores the results calculated by said frequency-of appearance-calculation unit;
 - a correlation-coefficient-calculation unit that calculates correlation coefficients between thesauruses;
 - a correlation-coefficient-memory unit that stores the correlation coefficients between thesauruses that were calculated by said correlation-coefficient-calculation unit;
 - a correlation-coefficient-total-calculation unit for each thesaurus that calculates the total of the correlation coefficients for each thesaurus;

a correlation-coefficient-total-memory unit for each thesaurus that stores the total of the correlation coefficients for each thesaurus calculated by the correlation-coefficient-total-calculation unit for each thesaurus; and

a graph-creation-display unit that creates and displays a graph based on the frequency of appearance stored by the frequency-of-appearance-memory unit and the correlation-coefficient totals for each thesaurus stored by the correlation-coefficient-total-memory unit for each thesaurus; and wherein

said word-cutting unit and said syntax-analysis unit perform said word-cutting process and said syntax-analysis process again based on said thesauruses created by said thesaurus-creation unit.

2. An information-processing method comprising:

an input step of inputting text data;

a text-data-memory step of storing said text data;

a word-cutting step of executing a word-cutting process on said text data;

a syntax-analysis step of performing a syntax-analysis process on said text data on which said word-cutting process was performed;

a thesaurus-creation step of creating thesauruses from said text data on which said syntax-analysis process was performed;

a thesaurus-memory step of storing said thesauruses created in said thesaurus-creation step;

a word-cutting and syntax-analysis step of performing said word-cutting process and said syntax-analysis process again based on said thesauruses stored in said thesaurus-memory step;

a thesaurus-sorting step of performing a sorting process on said text data on which said word-cutting and said syntax-analysis were performed;

a sorting-results-memory step of storing the sorting results from said thesaurus-sorting step;

a frequency-of-appearance-calculation step of calculating the frequency of appearance for each thesaurus based on said sorting results stored in said sorting-results-memory step;

a frequency-of-appearance-memory step of storing the results calculated in said frequency-of appearance-calculation step;

a correlation-coefficient-calculation step of calculating correlation coefficients between thesauruses;

a correlation-coefficient-memory step of storing the correlation coefficients between thesauruses that were calculated in the correlation-coefficient-calculation step;

a correlation-coefficient-total-calculation step for each thesaurus of calculating the total of the correlation coefficients for each thesaurus;

a correlation-coefficient-total-memory step for each thesaurus of storing the total of the correlation coefficients for each thesaurus calculated in the correlation-coefficient-total-calculation step for each thesaurus; and

a graph-creation-display step of creating and displaying a graph based on the frequency of appearance stored in the frequency-of-appearance-memory step and the correlation-coefficient totals for each thesaurus stored in the correlation-coefficient-total-memory step for each thesaurus.

3. An information-processing program that is executed on a computer to perform:

an input step of inputting text data;

a text-data-memory step of storing said text data;

a word-cutting step of executing a word-cutting process on said text data;

a syntax-analysis step of performing a syntax-analysis process on said text data on which said word-cutting process was performed;

a thesaurus-creation step of creating thesauruses from said text data on which said syntax-analysis process was performed;

a thesaurus-memory step of storing said thesauruses created in said thesaurus-creation step;

a word-cutting and syntax-analysis step of performing said word-cutting process and said syntax-analysis process again based on said thesauruses stored in said thesaurus-memory step;

a thesaurus-sorting step of performing a sorting process on said text

data on which said word-cutting and said syntax-analysis were performed;

a sorting-results-memory step of storing the sorting results from said thesaurus-sorting step;

a frequency-of-appearance-calculation step of calculating the frequency of appearance for each thesaurus based on said sorting results stored in said sorting-results-memory step;

a frequency-of-appearance-memory step of storing the results calculated in said frequency-of-appearance-calculation step;

a correlation-coefficient-calculation step of calculating correlation coefficients between thesauruses;

a correlation-coefficient-memory step of storing the correlation coefficients between thesauruses that were calculated in the correlation-coefficient-calculation step;

a correlation-coefficient-total-calculation step for each thesaurus of calculating the total of the correlation coefficients for each thesaurus;

a correlation-coefficient-total-memory step for each thesaurus of storing the total of the correlation coefficients for each thesaurus calculated in the correlation-coefficient-total-calculation step for each thesaurus; and

a graph-creation-display step of creating and displaying a graph based on the frequency of appearance stored in the frequency-of-appearance-memory step and the correlation-coefficient totals for each thesaurus stored in the correlation-coefficient-total-memory step for each thesaurus.

[DETAILED DESCRIPTION OF THE INVENTION]

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[Field of the Invention:]

This invention relates to an information-processing apparatus, information-processing method and information-processing program, and more particularly to an information-processing apparatus, information-processing method and information-processing program that creates thesauruses based on text data and finds the correlation between thesauruses.